# **Archaeological Report Guidelines**

Archaeological reports for different stages of project development should adequately reflect the level of investigation completed. The following format outline is intended to serve as a guide to the types of information that should be included in each report. Certain sections may not be applicable to Phase I or Phase II investigations. These guidelines have been prepared utilizing the "Georgia Standards and Guidelines for Archaeological Surveys," from the Georgia Council of Professional Archaeologists (2001), as well as the "Archaeological Assessment Report Guidelines and Components," from the Historic Preservation Division, State Historic Preservation Office (1994), and the Secretary of the Interior's Standards and Guidelines [Federal Register 48(190):44734-44737]. Additionally, it should be noted that the Society for American Archaeology's (SAA) *American Antiquity* (1992) "Style Guide" should be used in preparing any report.

Please refer to the GDOT Environmental Procedures Manual (EPM) for further information on preparing and processing of these and other documents for Cultural Resources review [see particularly Section 3.1.7B of Chapter V.3].

### Standard Archaeological Report Components

### **Front Matter**

- 1. Title Page:
  - a. Title of report including description and location of project as well as scope and type of investigations;
  - b. GDOT project number, PI number, and county(ies), HP number;
  - c. Author(s), if different than Principal Investigator (see below);
  - d. Principal Investigator(s), affiliation, address, phone number and signature (mandatory);
  - e. Name, address and phone number of client/consultant;
  - f. Lead state/federal agency and contract/permit number(s);
  - g. Date of report by month and year (date should be changed by version);
  - h. Report status (draft, revised draft, final); and
  - i. Standard statement of authorship.
- 2. Abstract/Management Summary: Should not exceed two pages, and should include:
  - a. Brief description of the project and purpose of investigation;
  - b. Precise summation of report's findings, conclusions and recommendations;
  - c. Mention of any significant (National Register of Historic Places/NRHP-eligible) properties found and any new information;
  - d. Report summary table: Cite date/version of the EPM utilized during project (i.e. the date/version of Chapter V.3), cite the 7.5' USGS topographic quadrangle maps depicting study area, list the acreage included in the study and/or the length and width of the project corridor, list number of previously recorded sites encountered by type, list number of new sites found by type, list number of isolates, list number of eligible sites by type, cite date of plans/layout used for survey, and provide an overview of field survey and/or testing time, in terms of man-hours. See example below:

# Report Summary Table Example:

EPM date/version	Chapter V.3, revised 4/28/10
USGS 7.5' quads	Warner Robins SE (1985)
Project Acreage, Length x Width of Corridor	8.3 acres, 1000 ft. x 250 ft. (~0.18 mile)
# of prev. sites	2-Multicomponent
# of new sites	1-Precontact, 5-Historic
Isolates	4
# of Eligible Sites	1-Precontact, 0-Historic
Date of plans	April 7, 2008
Man-hours	Phase I-160 hrs. Phase II-380 hrs.

e. List of keywords: Should include site numbers, county(ies), type of undertaking, type of archaeological study, place names, important diagnostic artifact types, features, or periods/sub-periods investigated, and evaluations.

- 3. Table of Contents
- 4. Figure and Table Lists

**Introduction:** Describe and discuss the purpose of the project, its proposed activities, results and possible impacts to archaeological sites, including the following information:

- 1. Give project description. Project description should be consistent with NEPA project description (in English units). \*All other reported measurements should be metric (see SAA quidelines), with the option for English equivalents (in parenthesis following);
- Include project sponsor, permit/contract numbers and reason for conducting project including statutory regulations under which project is being conducted (i.e. federal and state legislation);
- 3. Detailed definition of Area of Potential Effects (APE), with a description of the project area including any right-of-way (ROW), easements, and/or additional areas surveyed (for example, the extra 100 feet of expanded survey corridor [ESC]) and a description of undertaking, including the nature and extent of land- and resource-disturbance/potential impact(s) anticipated (considering both horizontal and vertical extents); Scope of Work; how project areas were investigated (type of investigation), dates of the investigation and personnel involved in the project; and disposition of field notes, artifacts and other materials;
- 4. Locate the project geographically on a state or county map, and include the project APE on a 7.5' USGS topographic quadrangle map. Include the name and date of the 7.5' USGS topographic quadrangle map in the caption. Construction or project planning figures may also be included. \*It is recommended that maps depict lines (such as existing and/or required ROW) and features (such as shovel tests, test units, surface collections, etc.) with standard, consistent symbology, which is easily interpretable in a black and white format. Each map must include a north arrow, scale, and legend; and
- 5. Overview of the development of the subsequent report.

#### Context:

<u>Environmental Setting:</u> This should be a detailed description of the project area environment, focusing on its resource utilization potential and factors affecting the preservation of archaeological sites. This should include past and present disturbances within the project area. This section should also discuss the ecological methods and techniques used to model past

environments. Representative photographs of the general project area and APE should be included.

At a minimum the following information should be included:

- 1. Physiographic province and local features of the landscape, including discussions of drainage, soils, hydrology, geomorphology, and geology;
- 2. Regional/local Pleistocene and Holocene microenvironment overview, including precontact and historic resource utilization potential, i.e. flora and fauna;
- 3. Modern environmental setting (historic environment and land use patterns, etc.); and
- 4. Current land use patterns and condition, as well as limiting factors for the investigations.

Previous Archaeological Investigations and Background/Contextual Overview: This section should include a statement that a site file search has been conducted at the Georgia Archaeological Site Files or through GNAHRGIS (Georgia's Natural, Archaeological, and Historic Resources Geographic Information System). An overview of previous archaeological investigations should include the names of investigators, institutions, dates of work, research purposes, methods, and results with eligibility recommendations of sites located and investigated. A 7.5' USGS topographic quadrangle map indicating the locations of previously recorded archaeological sites and surveyed areas within a 1 kilometer (km)-radius must be included. \*Please note that GASF and GNAHRGIS searches are only considered valid for one year post search date; if reporting occurs later than one year after the background review, a new/updated search should be undertaken.

### Other information to be included:

- 1. Location and nature of any publications, manuscripts, field notes and previously collected materials which were consulted;
- 2. Informants and their addresses;
- 3. Historic documents and records, maps (provide references);
- 4. Listing of all known resources located within a 1-km radius of the project area, including all NRHP properties and historic properties within and adjacent to project area and APE;
- 5. Reference to and coordination with the Historic Resources Survey Report and its findings, particularly when dealing with shared resources; and
- 6. Concise synopsis of the precontact\* and historic cultural record for the project area and the surrounding region. Define the region of interest (e.g. drainage, county, physiographic province, etc.). Discuss chronology, settlement patterns, means of subsistence, material culture, etc. for each period or sub-period defined. Discuss previous archaeological investigations in the area, noting methods of investigation and findings, and give examples of feature occurrences/patterns and site types for each period/sub-period. Overall, identify expected site types, potential site locations, and data patterns anticipated, on the basis of information gleaned from background research and understanding of environmental setting.

\*The term "precontact" is preferred, instead of "prehistoric" in discussions of non-European, or native occupations. If "precontact" is not used, the report should include the following note: "Standard archaeological practice has been to use the term "prehistoric" in discussions of occupations prior to AD 1540; however, it has been stated that a more accurate term is "precontact," in that native peoples had and recorded a history prior to the arrival of Europeans." In addition, it is recommended that "precontact" be used without a hyphen and in the following manner regarding capitalization: "Precontact period" but "precontact material," much like "historic."

7. If the report addresses further evaluative or mitigation work at a particular site, and previous work (Phase I or II) has been done, discussion of this previous work, including names of investigators, institutions, dates of work, research purposes, methods, and results, must be presented and considered.

<u>Research Design:</u> Research designs present explicit statements of theoretical and methodological approaches followed in a particular study. The nature and level of detail in this discussion will be consistent with the scope of the undertaking and type of investigation. Appropriate contexts should frame all research questions; an appropriate context would be one which was previously developed for a specific geographic region, type of investigation, or type of resource. In general, a discussion of research design should include the following:

Include a discussion on the expected archaeological potential for the project — area as well as research objectives. Focus on the relation of the investigations to state, regional, and national archaeological, architectural and historical studies, as well as to previous background research and the potential for site findings in the particular area. Outline specific questions to be tested during the study as well as what data may inform those questions. Discuss the hypotheses and implications to be tested, including techniques (field and laboratory) used to test particular implications. Include discussion on the limitations of the research design. This discussion could encapsulate previous research, contexts, and methods.

#### Methods:

<u>Field Techniques</u>: This section should be presented so that reviewers and future researchers may reconstruct what was done and why. Present a detailed discussion and evaluation of field techniques employed, including types of information collected, sampling techniques, artifact retrieval, and provenience recording measures. Methods should be based in general on those presented in GDOT's EPM, the "Georgia Standards and Guidelines for Archaeological Surveys," from the Georgia Council of Professional Archaeologists (2001), as well as the "Archaeological Assessment Report Guidelines and Components," from the Historic Preservation Division, State Historic Preservation Office (1994) and the Secretary of the Interior's Standards and Guidelines [Federal Register 48(190):44734-44737].

#### Include the following information:

- 1. Surface-survey techniques: Describe and justify in detail techniques used in the project area and on specific sites. Document surface conditions/visibility, survey intervals, and collection methods;
- 2. Subsurface techniques: Document shovel test pit (STP) and other subsurface methods used (such as auger), including intervals and dimensions of tests during survey and/or delineation activities; also discuss recovery methods used, including screen mesh size;
- 3. Remote-sensing and Metal Detection techniques: Describe and evaluate utility of applied methods, discuss limitations, assumptions, equipment, data ranges, settings, expertise of operator, etc.;
- 4. Test units: Describe test units, discussing size, depth, types of levels used (arbitrary or natural), methods of artifact recovery, recordation of features, soil profiles, etc. Specific information about individual units should be discussed in the results section, but rationale for placement/location should be covered here;
- 5. Trenches and/or Stripping Activities: Describe placement of trenches, describe equipment and methods of excavation used, discussing length, width, depth and location, as well as methods of artifact recovery (if applicable). Discuss methods of stripping, length, width of block by area, equipment used, methods of recordation of features, etc.;
- 6. Features: Describe methods used to excavate features, as well as methods of artifact recovery in features. If sampling is undertaken, describe rationale and methodology;
- 7. Methods for specialized analyses, such as geomorphological investigations, if not covered in a separate report (must be presented in the appendix or referenced);
- 8. Methods for underwater investigations, including a record of the weather/environmental conditions at time of survey, search methods, equipment, etc.;
- 9. Give definition of archaeological site and isolated find;
- 10. Discuss methods for identifying all historic property types, including deeply buried sites, cemeteries, and/or traditional cultural properties (TCPs), based on background research and environmental setting.

<u>Laboratory Methods and Artifact Curation:</u> This section should involve a detailed discussion of laboratory methods used to analyze and curate artifacts, and should include the following:

- 1. Describe classificatory or typological schemes used in artifact description and analysis. Give rationale for selection and cite resources;
- 2. Discuss all metric and non-metric techniques used to process and analyze artifacts and other archaeological materials;
- 3. Note means of chronological determination for artifact assemblages (e.g. relative or radiometric):
- 4. Describe any specialized samples methods for processing and analysis (e.g. flotation, radiocarbon, faunal, botanical, pollen, soils, residue analysis, lithics, ceramics, or skeletal remains). Discuss size of samples taken, techniques for analysis; and
- 5. Include information regarding the future location of the curated artifacts and documents.

<u>Evaluation Criteria:</u> Include a discussion of the NRHP eligibility criteria and aspects of integrity.

**Results & Analysis:** This section should provide a fluid presentation of the overall results of investigations within the project area and APE. First, provide discussion of overall project findings and delineate the boundaries of the project impacts, as well as type of investigation done in each area (i.e. pedestrian survey, shovel testing, etc.) on a 7.5' USGS topographic quadrangle map. Second, site descriptions and technical data from the investigations should be provided. Third, an analysis of the results within the context of each site and within the context of the overall project and cultural area should be presented. See the following sections for guidelines on the minimum required information to be presented as well as considerations for analyses for each of the above-mentioned focus areas.

Description of Investigations: The location of all surveyed areas, all transects and all excavated STPs should be presented and discussed as well as a description of field conditions throughout the corridor; representative photographs should be included and matched to location. Areas not surveyed or STP locations "not dug" should be discussed, depicted on maps, and reasons for not excavating should be justified. Note all constraints on the investigation (e.g. limited access, poor visibility, landowner restrictions and weather conditions). Give justification for deviation from standard techniques recommended for archaeological survey in Georgia (see EPM, as well as state and federal guidelines) and justify any in-field modifications of stated research strategies. Any variations in techniques due to varying field conditions (i.e. ground cover, erosion, development, etc.) or site type (deeply buried, etc.) should be discussed. Include the location of all identified sites and isolated finds on a 7.5' USGS topographic quadrangle map, along with project limits and areas of survey/APE. Also provide an overview of field survey/test time, in terms of man-hours for terrestrial surveys and dive logs for underwater surveys.

<u>Resource Descriptions:</u> Discuss all of the archaeological sites identified during the investigation. Describe all isolated finds and provide sketch maps of delineations.

Clear, concise descriptions of each site should include, at a minimum (this information may be presented in a phased format if the report addresses Phase I and II investigations in separate sections):

1. Maps: Site survey/sketch maps should include the location of all positive/negative STPs, surface collections, surface scatters, STPs "not dug," auger probes, backhoe trenches, collection blocks, transects, test units and/or features as well as other cultural or natural surface features, along with a depiction of the project areas and activities [such as ROW, easements, ESC, or overall APE]; maps should include a north arrow, scale, and legend, and it is recommended that maps depict lines (such as existing or required ROW) and features (such as shovel tests) with standard, consistent symbology, which is easily interpretable in a black and white format; features on maps should be labeled in a consistent and easily readable manner;

- 2. Photographs: Include representative photographs of all site areas identified, include descriptive captions;
- 3. Site number, name, and any institutional designations; if the site is previously recorded, discuss the circumstances of its recordation along with any previous investigations and findings;
- 4. Site extent/size, with known vs. unknown boundaries distinctly described and marked in relation to project area and APE, considering both horizontal and vertical dimensions;
- 5. Site location, including verbal location description;
- 6. Site setting, including landform, elevation, soils, vegetation, and nearest water source;
- 7. Description of artifacts recovered from surface and subsurface survey and testing collections; artifacts should be presented in tables so that they are summarized by material class and provenience;
- 8. Description of stratigraphy, including Munsell categorizations;
- 9. Description of site components/occupations, cultural affiliations, and/or functional types;
- 10. For historic sites include a discussion on archival research conducted for the site. Include chain of title, deeds, manifests and other inventories; consult historic documents, photographs, and maps. Cross reference this information with the Historic Resources Survey Report and provide citation; and
- 11. Overview of the integrity of the area of a site or isolated find, including such characteristics as land use and vegetation, etc.

In discussing the details of fieldwork at each site, including surface and subsurface investigations, the following requirements should additionally be noted:

- Describe the number of STPs, test units, auger probes, and trenches excavated. Note how
  many STPs were "not dug" and detail areas that were pedestrian surveyed. For test units
  or trenches, discuss the total area excavated in square meters. If large areas were
  exposed through mechanical work, indicate the amount of area in square meters/square
  feet;
- 2. Profiles of STPs, auger probes, trenches, and test units must be in the report; a representative view of each unit should be recorded. All profile maps/sketches must include a vertical and horizontal scale and legend, and captions should indicate the direction of the profile view;
- 3. Describe soils identified in STPs, auger probes, test units and trenches, including texture, composition, and Munsell color. Include a discussion on geomorphology and site formation processes. Discuss depth or limits of cultural deposits at site as well as vertical and horizontal disturbances such as erosion, borrowing, or filling;
- 4. Indicate the depths at which artifacts were encountered within STPs and units as well as their overall density across the site, vertically and horizontally;
- 5. Include plan view and profile drawings of identified features with the appropriate scale and legend. Discuss and describe identified feature forms and types (e.g. postmolds, hearths, basin-shaped pits, etc.). Information on length, width, and depth may be presented in text or table format;
- 6. Include photographs of the site area, excavated profiles and plan views, and feature profiles and plan views. Unit photographs must have a photo board, scale, and north arrow. All captions must include the direction from which photos are taken;
- 7. The artifact assemblage should be described as well as tabled; this includes a complete description of recovered artifacts by provenience. Detailed artifact descriptions should include material class, type, along with counts, weights, and any measured attributes of diagnostic material; relationship of artifact attributes to chronological or functional markers should be discussed and references given; information regarding artifacts should match in text and tables; and
- 8. Artifact densities per unit and unit level should be described, and distribution of artifact types per unit and unit level across the site should be mapped. Unit and feature descriptions should include total artifacts and artifact types recovered.

<u>Analysis:</u> In presenting the results of further artifact, site, and sample analyses, the following should be considered and included:

- 1. Definitions of analytical units used and specific material culture classes recognized (e.g. used flake, shatter, biface, projectile point), provide citations to appropriate references;
- 2. Metric observations on artifacts recovered with diagnostic attributes (e.g. length, width, thickness, weight, etc.) applicable to research questions (example: width of incised lines for Lamar ceramics);
- 3. Examination of artifact frequency and artifact types in relation to the site as a whole, across features and excavated units (e.g. density maps, Minimum Number of Vessels, etc.); describe artifact integrity in units and across the site;
- 4. Photographs and/or drawings of representative artifact types and diagnostic artifacts, including descriptive caption and scale;
- 5. Description and discussion of specialized analysis conducted (e.g. faunal and botanical);
- 6. Intrasite variability, distribution, and pattern: If variable densities are noted (e.g. define activity areas), discuss the variation in artifact types recovered at the site, horizontally as well as vertically;
- 7. Discuss comparisons in the variability between test unit and feature artifact frequencies across the site; discuss the relationship of artifacts to features and features to overall landscape;
- 8. If multiple occupations or components are identified, discuss variability in artifact density and types among and between components;
- Discuss the occupational history of the site; discuss site type(s) with supporting evidence; discuss site function(s) with supporting evidence;
- 10. Discuss percentage of site areas with artifact collections, as it relates to land use patterns and physical condition (integrity); describe potential artifact collection biases (surface visibility, integrity, and previous collections);
- 11. Discuss inter-site variability, comparing the artifact assemblage to other sites in the APE and to similar sites in the region, provide placement in a regional context; and
- 12. Relate historic finds to larger contexts such as whole historic property(ies) or cultural landscapes.

Evaluation: Whether presented as a separate discussion or incorporated into the results section, this section establishes the framework for evaluating the NRHP eligibility of sites identified during the survey. A determination of eligibility results from discussion of a site's significance and integrity. Significance evaluations must be presented with specific reference to the (previously presented) Evaluation Criteria (i.e. criteria of eligibility for the NRHP); should specific historic property types be encountered, evaluation should include review of guidelines presented in National Register Bulletins for specific property types. Evaluations should be consistent with stated research goals and objectives; should be informed by local, regional, and/or national contexts; and must be justifiable, consistent with the methods and techniques used to locate and investigate recorded sites during the study as well as the findings of the investigations. It is insufficient to merely state that a site is or is not significant, and it is not sufficient to say that a site is of low density, low diversity, or highly disturbed and therefore ineligible without justification based on the data and its potential. In general, if a site is recommended as ineligible, explicitly state the rationale behind its exclusion. If a site is recommended as eligible, present supporting evidence, including research topics that could potentially be addressed. Discuss types of data known to be or thought to be present, and indicate what can be inferred from this data. If there is not enough information to evaluate eligibility, state so explicitly and conclude as "unknown"; remember that this recommendation is the most appropriate if it is not possible to investigate the full site boundary due to project constraints. Remember to recommend a level of significance - local, state, or national. Identify and explain any factors that have or may have affected site integrity. All seven aspects of integrity should be considered with respect to a site's characteristic/significant features. Remember that isolated finds are by definition ineligible, unless special circumstances occur, such as the lack of an established boundary.

**Recommendations/Management Considerations:** This section must contain adequate information so that proper cultural resource management decisions can be made. Each archaeological site description must include a concise statement concerning the NRHP eligibility of the identified resource as well as proposed activities/impacts in the area of the site. Please consider all probable effects, i.e. direct and indirect impacts, describe all activities, and make recommendations accordingly, as below:

- 1. If resource is <u>not eliqible/ineliqible</u> for the NRHP, then a No Effect determination is appropriate. Project clearance is recommended.
- 2. If resource is considered <u>eligible</u> to the NRHP, then the distribution of contributing features and the integrity of such deposits should be considered and thoroughly evaluated in relation to the proposed impacts/activities.

Project effects must be further considered through an Assessment of Effects (AOE) -

- a. Project can have No Effect or No Adverse Effect, through measures such as Avoidance/Preservation in Place, or Minimization efforts
- b. Project will likely have Adverse Effect and will require the following: Development of a Memorandum of Agreement, stipulating mitigative measures, and/or Development of a data recovery plan
- c. Eligible areas outside the APE should be protected with an environmentally-sensitive area (ESA) designation, with orange fabric safety fencing delineated at the edge of proposed construction in the area of the resource. If an ESA is designated, depict and describe the limits of the ESA and recommendations for the placement of orange fabric safety fencing in terms of project station numbers or mile post markers along the corridor.
- 3. If eligibility of resource is considered to be <u>unknown</u>, then the following conditions/stipulations may apply:
  - a. Site boundaries are not fully determinable (i.e. site likely extends outside APE, etc.); site area within APE should be evaluated as *contributing* (meaning eligible, see recommendations in #2) or *non-contributing* (meaning ineligible, see recommendations in #1) to the site's overall eligibility for the NRHP;
  - b. If only Phase I work has been accomplished, and site evaluation is incomplete and/or inconclusive, Phase II testing could be recommended; recommendations for methods and research questions should be discussed;
  - c. Protective measures should be considered for any unknown site areas outside the APE, regardless of the eligibility recommendation for the portion of the site inside the APE; areas outside the APE should be protected with an environmentally-sensitive area (ESA) designation, with orange fabric safety fencing delineated at the edge of proposed construction in the area of the resource. If an ESA is designated, depict and describe the limits of the ESA and recommendations for the placement of orange fabric safety fencing in terms of project station numbers or mile post markers along the corridor.

<u>Discussion/Evaluation of Research:</u> Discuss and evaluate research goals and questions addressed in the research design and throughout the development of the project, including:

- 1. Data reliability;
- 2. Relation of analysis to stated goals;
- 3. Synthesis and comparison of analytical results;

- 4. Integration of ancillary data;
- 5. Identification and discussion of the data in terms of regional and local history and prehistory/precontact contexts;
- 6. Evaluation of the potential avenues of research with regard to the curated collection. Include recommendations for further specialized studies. Additionally, as applicable, a statement should be made as follows: "Based on artifact type and context, none of the artifacts recovered during this investigation are subject to the Native American Graves Protection and Repatriation Act (1990) and thus the curated collection does not contain human remains, funerary objects, sacred objects, or objects of cultural patrimony," and
- 7. Address future potential research questions and/or future directions for research.

<u>Conclusions:</u> Provide a succinct summation of project, findings, and recommendations. In addition, provide a table synthesizing overall results (if not presented elsewhere); this table should include a listing of all site numbers, site types/descriptions, components, and NRHP eligibility recommendations, along with a brief note regarding planned activities in the area of each site.

**References Cited:** All references cited in the text must be included in this section and all entries in this section must be cited in the text. Use SAA Style guide formatting.

<u>Appendices:</u> Should include at a minimum the following: Georgia Archaeological Site Forms, Artifact Catalog, short curriculum vitae (CV) of the Principal Investigator, and any applicable permits (ARPA), as well as construction plans or concept layouts showing project areas or areas surveyed, and a copy of the landowner notification letter with a table of letter recipients, along with any responses or issues noted. Appendices may also include scope of work, specialist analyses/reports, correspondence from interested/consulting parties, etc.

# ADDENDUM REPORTS

If investigations are an extension or amendment to a previously submitted and reviewed project (report), an Addendum to the existing report(s) may be prepared.

Addendum reports generally follow the same guidelines presented above; however, a few additional considerations apply: 1) The title should include "Addendum" or should indicate that the report is subsequent/additional to previous work on a project; 2) Project changes should be specifically detailed in the Introduction, in addition to the general Project Description; 3) The original and all previous reports should be referenced in the addendum's section on Previous Archaeological Investigations and should be cited in the References Cited; and 4) The Environmental Overview as well as the cultural history section of the Background/Contextual Overview may be abbreviated or may be eliminated, if presented adequately in previous documents and if there have been no changes since submittal of the original report (i.e. no sites have since been recorded in the area). \*Please note that GASF and GNAHRGIS searches are only considered valid for one year post search date; if reporting occurs later than one year after the background review, a new/updated search should be undertaken.

Consultation with the GDOT Project Archaeologist is recommended regarding the content of addendum reports.